

NAME CHANGES FOR THE SEED PLANTS IN THE BAHAMA FLORA

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The author has been working in collaboration with Richard A. Howard of the Arnold Arboretum and George R. Proctor of the Institute of Jamaica towards a revision of Britton and Millspaugh's "Bahama Flora," published first in 1920 and reprinted without changes in 1962. A recent paper by the three of us (Gillis, Howard, and Proctor, 1973) has reported additions to the flora of the Bahamas based on personal collections, new collections available to us, and reports from the literature.

The present paper offers updated annotations on the correct scientific names to be applied to the species listed by Britton and Millspaugh whose work was completed under the provisions of the American Code of Botanical Nomenclature. We encourage others to use this list and its supporting bibliography, and to report additional changes or additions to me. We would particularly value contributions which specialists in non-vascular plants could make to the listings in Britton and Millspaugh for mosses and liverworts, algae, fungi, slime molds, and lichens. Our efforts will consider only the flowering plants and pteridophytes. We therefore encourage workers in these other fields of botany to update knowledge of their disciplines in the Bahamas too.

The value of lists of nomenclatural corrections has been evident to us in the work of Alain (1965) on the flora of Puerto Rico and the Virgin Islands. Additional nomenclatural changes have been obtained from monographs or the recent floras of Jamaica (Adams, 1971) and Barbados (Gooding et al., 1965). In all of these, however, the reasons for the changes of names are not always explained, requiring the curious or careful worker to reinvestigate each and every problem. I believe the explanations which accompany the changes reported here will be of value to

other workers in subtropical New World floras and particularly in the West Indies. Reasons given for changes are usually: use of an earlier epithet, avoidance of a tautonym, replacement of a later homonym, correct application of a name, etc. When name changes have been made by others than myself, I have cited the publication upon which this information was based. Conversely, when I have had reason not to accept a particular treatment, then reasons have been stated.

The listing is by no means complete. Certain groups within the Boraginaceae, Rubiaceae, Loranthaceae, and Asclepiadaceae need intensive study and many more observations in the field, especially in such genera as *Heliotropium*, *Borreria*, *Dendropemon*, *Phthirusa*, and *Cynanchum*. A new look must be given to the genus *Agave* for the West Indies, inasmuch as the most recent treatment is now 60 years old (Trelease, 1913). Other groups including the ferns are being studied by others at the present time and we await publication of the conclusions of these investigators.

The Turks and Caicos Islands are politically a separate Crown Colony from the newly independent Commonwealth of the Bahama Islands. Britton and Millspaugh included all within the Bahama Flora and such is the geographical sense employed here in that it includes the Turks and Caicos Islands as well.

For ease of reference this paper will follow the order of species presented in Britton and Millspaugh's Bahama Flora, which will be Monocotyledons first, followed by the Dicotyledons, and then the Gymnosperms. Again for brevity, Britton and Millspaugh's flora is referred to by the expression B&M in the text of this paper. The figure in the left margin refers to the page in B&M on which the taxon in question is discussed. The name following the arrow (→) is the name considered to be correct. These names are not necessarily nomenclatural or taxonomic equivalents, hence the reason for not employing an equals

sign (=). In some instances, B&M misidentified the plant or used a binomial incorrectly. Where monographs or significant studies support the use of names as they were employed in B&M, such references are cited under the generic name, e.g., *Guaiacum* (Porter, 1972).

In a few instances where the name changes have involved closely allied genera, or where the existing keys in B&M are wholly inadequate, particularly for use in the field, I have provided new keys. They are designed to employ characters of the floral, fruiting, and vegetative portions of the plant so that they can be of optimum use in working with specimens, whether living or in the herbarium, and whether reproductive or vegetative.

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TYPHACEAE

- 4 *Typha angustifolia* → **Typha domingensis** (Pers.) Kunth. These are two different valid species according to Hotchkiss and Dozier (1949) with only *Typha domingensis* occurring in the Bahamas.

POTAMOGETONACEAE (ZANNICHELLIACEAE)

- 5 *Potamogeton heterophyllus* → **Potamogeton gramineus** L. var. **gramineus**. On the basis of both herbarium specimens and abundant fresh material from a pond on San Salvador Island (*Gillis 8864*), I have considered all the *Potamogeton* material on the Islands to be the same (see Ogden, 1943).
- 5 The question of good characters, reliable under all conditions, for separating *Ruppia maritima* from *R. cirrhosa*, is still open. Various treatments have been consulted (Fernald and Wiegand, 1914; Hagstrom, 1916; McCann, 1945; Setchell, 1946; Reese, 1962a and b; Gamarro, 1968; and Schwanitz, 1967) for specimens collected in the Bahamas. For the moment, it appears that both species seem to be present. Therefore, *R. cirrhosa* is an addition to the flora, rather than merely a different name for the species in B&M. Collectors are urged to look for *R. cirrhosa* inasmuch as flowering and fruiting material are as yet unknown in the Bahamas. An adaptation of Gamarro's key follows:

Peduncle of inflorescence more than 10 cm. (8-60 cm.), coiled until anthesis; anther sacs reniform, 1.7 mm. long; fruits rounded at apex; leaves 1 mm. broad; leaf epidermal cells 16-19 μ ; $2n = 40$
 *Ruppia cirrhosa* (Petagna) Grande.
 Peduncle of inflorescence less than 5 cm., not coiled in spiral until anthesis; anther sacs elliptic, 0.6-0.7 mm. long; fruits irregularly pointed; leaves 0.5

mm. broad; epidermal cells of leaves $12.5-16.0\mu$;
 $2n = 20$ *Ruppia maritima* L.

ZANNICHELLIACEAE (CYMODOCEACEAE)

- 6 *Cymodocea manatorum* → **Syringodium filiforme** Kütz.
 This change of name follows Dandy and Tandy (1939)
 and den Hartog (1970).
- 6 *Halodule wrightii* Aschers. is indeed in the Bahamas,
 but so is *H. beaudettei* (den Hartog) den Hartog
 (1964). These two species can be separated as fol-
 lows:

Leaf tips bicuspidate; leaf blades $1/3-4/5$ mm.
 wide; leaves with linear teeth, concave on the inner
 side ... *Halodule wrightii* Aschers.

Leaf tips tricuspidate; leaf blades $2/3-1\frac{1}{4}$ mm.
 wide; leaves with linear lateral teeth ... *Halodule*
beaudettei (den Hartog) den Hartog.

HYDROCHARITACEAE (ELODEACEAE)

- 8 *Halophila* — consult Hartog (1959).

ALISMATACEAE

- 7 *Echinodorus cordifolius* → **Echinodorus berteroi**
 (Spreng.) Fass. (See Fassett, 1955).

GRAMINEAE

- 13 There is some question among agrostologists whether
Schizachyrium should be segregated from *Andropogon*
 as it was in B&M. Chase (1951) joins the two genera.
 For the moment, however, I shall follow treatments
 by Gould in maintaining them as separate genera
 (see Gould, 1967, 1968, and 1969).
- 14 *Nazia aliena* → **Tragus berteronianus** Schult. *Tragus*
 is conserved over *Nazia*. The species epithet changed
 from *aliena* to *berteronianus* because the type of
Lappago alienus Spreng., the basionym, is referred
 to *Pseudechinolaena polystachya* (H.B.K.) Stapf, and
 not to this Bahamian plant (Chase, 1951).

- 15 *Syntherisma filiformis* → **Digitaria panicea** (Sw.) Urb. The species on which the epithet *filiformis* is based is a different species from the one of concern here. The earliest name for this species is *Milium panicea* Sw. which was transferred to *Digitaria* by Urban. The combination was made twice in the same year (1920), by Urban in February and by Fernald in June. The Urban combination obviously has priority. *Digitaria* is an earlier generic name than *Syntherisma*.
- 16 *Syntherisma digitata* → **Digitaria horizontalis** Willd. *Milium digitatum* Sw. (1788) is the earliest basionym, but is preoccupied in *Digitaria* by *D. digitata* Buse (1854). The next earliest name available is *D. horizontalis* Willd. (1809).
- 16 *Syntherisma sanguinalis* → **Digitaria sanguinalis** (L.) Scop.
- 16 *Valota insularis* → **Trichachne insularis** (L.) Nees. *Valota* is inadequately published (Chase, 1951).
- 18 *Paspalum poiretii* R. et S. → **Paspalum sagetii** Chase. *Paspalum caespitosum* → **Paspalum poiretii** R. et S. The work of Chase (1929) sorts out the names of these *Paspalum* species by typifying them. It is thus apparent that, although the name *P. poiretii* is still used in the Bahama flora, it must be applied to a different species from the one to which it was assigned by B&M.
- 18 *Paspalum portoricense* → **Paspalum molle** Poir. in Lam. The change is required because of an earlier epithet (Chase, 1951).
- 18 *Paspalum simpsonii* → **Paspalum blodgettii** Chapm. *Paspalum blodgettii* is an earlier name for *P. simpsonii* Nash, and not a synonym of *P. caespitosum* Chase, 1951).
- 19 *Paspalum glabrum* → **Paspalum laxum** Lam. The change is required because of an earlier epithet (Chase, 1951).
- 20 *Paspalum distichum* L. is attributed by B&M to the

Pugil. Pl. Jam., one of the dissertations of Linnaeus (1759). It actually appeared earlier in the same year in the *Systema Naturae*, ed 10, and should be so attributed.

- 22 *Panicum barbinode* → ***Panicum purpurascens*** Raddi. The change is required because of an earlier epithet (Hitchcock, 1936).
- 22 *Panicum distantiflorum* → ***Setaria distantiflorum*** (A. Rich. in Sagra) Pilger.
- 22 *Panicum chapmani* → ***Setaria chapmani*** (Vasey) Pilger. Rominger (1962) has shown that these two species properly belong in *Setaria*.
- 24 *Panicum dichotomiflorum* → ***Panicum bartowense*** Scribn. et Merr. These names were treated as synonymous by B&M. Hitchcock (1935) and Chase (1951) felt that they are separate species and that the Bahamian plant is *P. bartowense*. Fernald (1934) treated the taxon as *P. dichotomiflorum* var. *bartowense* (Scribn. et Merr.) Fern.
- 24 *Panicum coerulescens* → ***Panicum coerulescens*** Hack. ex Hitchc. This change is simply a corrected spelling.
- 27 *Oplismenus hirtellus* (L.) R. & S. 1817 → ***Oplismenus hirtellus*** (L.) Beauv., Ess. Agrost. 54, 168. 1812. An author change is needed for this earlier publication of the binomial.
- 27 *Chaetochloa geniculata* → ***Setaria geniculata*** (Lam.) Beauv.
- 28 *Chaetochloa setosa* → ***Setaria setosa*** (Sw.) Beauv.
- 28 *Chaetochloa macrosperma* → ***Setaria macrosperma*** (Scribn. et Merr.) K. Schum. *Setaria* is the older and preferred name over *Chaetochloa*. *Setaria* Beauv. is conserved over *Setaria* Michx.
- 28 *Cenchropsis mysuroides* → ***Cenchrus mysuroides*** H.B.K. *Cenchropsis* is not now considered distinct from *Cenchrus* (Chase, 1936 and Delisle, 1963).
- 29 *Cenchrus carolinianus* → ***Cenchrus incertus*** M. A. Curtis. The use of *Cenchrus carolinianus* in B&M was a misapplication of the name. That name is

now considered a synonym of *C. longispinus*, but is correctly used for a plant not found in the Bahamas. The plant in question is *C. incertus* which is widespread in the Bahamas (DeLisle, 1963).

- 29 *Cenchrus microcephalus* → **Cenchrus incertus** M. A. Curtis. DeLisle (ibid.) felt that there was so little difference between the "endemic" race of *Cenchrus* with small fruits and the more widespread species that he treated them as conspecific. The small fruited form should be considered an insular form.
- 29 *Cenchrus viridis* → **Cenchrus brownii** R. et S. This name change is required because of an earlier epithet (DeLisle, ibid.).
- 30 *Stenotaphrum* — Consult Sauer, 1972.
- 31 *Aristida gyrans* → **Aristida vilfifolia** Henr. After publication of B&M, *Aristida vilfifolia* was segregated as a distinct species from *A. gyrans* which was the name in B&M (Henrard, 1926-33; 1929-33). It is the segregate which indeed is the one in the Bahama flora.
- 31 *Aristida scabra* → **Aristida ternipes** Cav. This change is required because of an earlier epithet.
- 32 *Sporobolus indicus* → **Sporobolus jacquemontii** Kunth.
- 33 *Sporobolus berterioanus* → **Sporobolus indicus** (L.) R. Br. In the *Sporobolus indicus* complex, there are two Caribbean species which are often confused: *S. jacquemontii*, which has an obtuse upper glume and is a fully tropical species, and *S. indicus*, which has an acute upper glume and is a more subtropical species. According to the description in B&M, these taxa have been confused (Clayton, 1964 and personal communication).
- 33 *Sporobolus atrovirens* → **Sporobolus bahamensis** Hack. *Sporobolus atrovirens* is a different plant from the one in the Bahamas; it is a Mexican plant, is a perennial, and has smaller spikelets and glumes than *S. bahamensis*. The latter is a Bahamian endemic and an annual.

- 33 *Sporobolus argutus* → **Sporobolus pyramidatus** (Lam.) Hitchc. This name change is required because of an earlier basionym. The citation for Domingan drop-seed-grass should be *Sporobolus domingensis* (Trin.) Kunth, Rév. Gram. 1, Suppl.; xvii. 1830, a citation three years earlier than that cited in B&M.
- 34 *Capriola dactylon* → **Cynodon dactylon** (L.) Pers. *Cynodon* is conserved over *Capriola*.
- 36 *Chloris polydactyla* → **Chloris dandyana** Adams. Adams (1971) published a new name for this plant without giving the background reasons for the illegitimacy of the original name. The background is as follows: There is a Jamaican plant with the legitimate name *Andropogon barbatus* L. Some time after describing this Jamaican grass, Linnaeus applied the same binomial to an East Indian grass. The epithet *barbatus* (referring to the East Indian species) was transferred to *Chloris* by Swartz, an act which prevents the transfer of the Jamaican species epithet to *Chloris*. In the meantime, Linnaeus proposed a superfluous name for the first *Andropogon barbatus*, i.e., *A. polydactylos*. Swartz's transfer of this superfluous name to *Chloris* is illegitimate; hence Adams's publication of a new name for the species in the West Indies. (I should like to acknowledge personal communication from C. D. Adams and J. E. Dandy for the historical background on this matter.)
- 39 *Phragmites phragmites* → **Phragmites australis** (Cav.) Trin. ex Steud. Clayton (1968) pointed out that the correct name for the pan-tropical reed is the combination used above.
- 39 *Diplachne fascicularis* → **Leptochloa fascicularis** (Lam.) A. Gray. Current views of agrostologists suggest that *Diplachne* should be contained within *Leptochloa*.
- 41 *Eragrostis ciliaris* (L.) Link 1827 → **Eragrostis ciliaris** (L.) R.Br. in Tuckey, 1818. Chase (1951) recorded the earlier publication of this combination.

- 42 *Uniola virgata* → **Leptochloöpsis virgata** (Poir.) Yates. Yates (1966) has subdivided *Uniola* into *Uniola*, *Chasmanthium*, and *Leptochloöpsis* on the basis of a number of anatomical, cytological, morphological, and embryological characters. Because this species of spike-grass is considered close to *Leptochloa*, Yates erected *Leptochloöpsis* to contain it and another species from Ecuador.

CYPERACEAE

- 44 *Cyperus paniculatus* → **Cyperus polydactylos** Rottb. These names originate from the same date and are considered to be synonymous. Corcoran (1941) chose *C. polydactylos* to be the inclusive name. The Bahama populations might be designated as *C. polydactylos* var. *texensis* (Torr.) Fern. (McLaughlin, 1944).
- 45 *Cyperus cuspidatus* → **Cyperus aristatus** Rottb. True *C. cuspidatus* does not occur in the Bahamas, but in Cuba. (See Horvat, 1941; McLaughlin, 1944).
Cyperus pseudovegetus → **Cyperus distinctus** Steud. *Cyperus pseudovegetus* was a name misapplied to the plant of the Bahamas (O'Neill, 1939).
- 46 *Cyperus brunneus* → **Cyperus planifolius** L. C. Rich. This name change is required by an earlier epithet (McGivney, 1938; McLaughlin, 1944).
- 47 *Cyperus ferax* → **Cyperus odoratus** L. var. **odoratus**. O'Neill (1940) demonstrated that these two names apply to the same species, and that *C. odoratus* is the earlier name. He further thought that the typical variety was the one found in the Bahamas. According to the treatment by McLaughlin (1944), the populations of *Cyperus filiformis* Sw. in the Bahamas are of the typical variety (var. *filiformis*).
- 49 *Stenophyllus wilsonii* → **Bulbostylis floccosa** (Griseb.) Clark in Urb. *Stenophyllus* is merged with *Bulbostylis* in the treatment by Kral (1971). *Bulbostylis floccosa* is the earliest name. It is not endemic to the

Bahamas as stated in B&M, but also is found in Cuba and Hispaniola.

- 50 *Fimbristylis diphylla* → **Fimbristylis dichotoma** (L.) Vahl. This change is required because of an earlier basionym.
- 51 According to B&M, the record of *Fimbristylis hirta* in the Bahamas is very tenuous. Neither Kral nor I have seen any material from the Bahamas. If indeed it does occur there, its more appropriate name should be *F. squarrosa* Vahl (see Kral, 1971).
- 52 *Abildgaardia monostachya* → **Abildgaardia ovata** (Burm. f.) Kral. This change is required because of an earlier epithet (Kral, *ibid.*).
- 53 There are cyperologists who wish to merge *Dichromena* with *Rhynchospora*. On the basis of the striking white bracts and insect pollination characteristic of *Dichromena*, I am, for the moment at least, retaining it as distinct.
- 54 *Rhynchospora cyperoides* → **R. cyperoides** (Sw.) Mart. var. **cyperoides**.
- 54 *Rhynchospora tracyi* → **Rhynchospora cyperoides** var. **triceps** (Vahl) Bock. This treatment follows that of Kükenthal (1949).
- 55 *Rhynchospora perplexa* → **Rhynchospora microcarpa** Baldw. ex Gray. Gale (1944) maintained that true *R. perplexa* was not in the Bahamas and that all the material which Britton and Millspaugh called by this name was misdetermined.
- 55 *Rhynchospora bahamensis* Britt. → **Rhynchospora lindeniana** var. **bahamensis** (Britt.) Gale. Gale's treatment (*ibid.*) of the West Indian *Rhynchospora* species reduced Britton's species to a variety of the more widespread *R. lindeniana*.
- 56 *Rhynchospora marisculus* → **Rhynchospora odorata** C. Wright ex Griseb. Gale (*ibid.*), in examining the same material which Britton and Millspaugh did, determined that the use of *R. marisculus* in B&M was a misapplication of the name.

- 56 *Mariscus jamaicensis* → **Cladium jamaicense** Crantz. Most treatments now segregate *Cladium* from *Mariscus*.
- 57 *Scleria*. Consult Jackson, 1949.

PALMAE (ARECACEAE)

- 59 *Thrinax parviflora* → **Thrinax floridana** Sarg. *Thrinax parviflora* is an endemic species of Jamaica. Furthermore, the treatment of *Thrinax* by Read in Adams (1971) will be superseded now that additional type material has been examined. The correct name for the small thatch of South Florida and the northern West Indies with leaf segments broadest at the point of fusion, with scattered, fimbriate, centrally translucent scales, and glabrous axes should be *T. floridana* (Read, personal communication).
- 59 *Thrinax parviflora* → **Thrinax floridana** Sarg. *Thri-* (Jacq.) L. H. Bailey. True *C. argentea* may exist in the southern Bahamas, but this has yet to be demonstrated. It is now treated as being indigenous to Hispaniola. (See Moore, 1963).
- 60 *Paurotis wrightii* → **Acoelorrhaphe wrightii** (Griseb. ex H. Wendl.) H. Wendl. ex Becc. The preferred name for the Paurotis palm, Spanish-top, or Everglades palm is now *Acoelorrhaphe* (Moore, 1963).
- 61 *Pseudophoenix vinifera* → **Pseudophoenix sargentii** subsp. **saonae** (Cook) Read. True *P. vinifera* is indigenous to Hispaniola and is not known from the Bahamas. (Read, 1968).

COMMELINACEAE

- 67 *Commelina longicaulis* → **Commelina diffusa** Burm. f.
- 67 *Commelina elegans* → **Commelina virginica** L. Name changes are made here in accord with the treatment by Brashier (1969). The following key may be more easily used than that in B&M:

Plant annual, trailing; spathes not united at the base, margins ciliate; internodes glabrous; sta-

minodes 2 *Commelina diffusa* Burm. f.
 Plant perennial, tufted and erect; spathes united at
 the base, margins membranous; internodes puberulent;
 staminodes 3 *Commelina virginica* L.

- 68 *Rhoeo discolor* → **Rhoeo spathacea** (Sw.) Stearn. This name change follows Stearn (1957) who discovered that the earlier epithet of Swartz applies to this plant.

AGAVACEAE (LILIACEAE)

- 69 *Cordyline guineensis* → **Sansevieria hyacinthoides** (L.) Druce. This change follows Wijnands (1973).

SMILACACEAE

- 71 *Smilax*. Consult Coker, 1944.

AMARYLLIDACEAE

- 78 *Atamosco rosea* → **Zephranthes rosea** Lindl.
 78 *Atamosco cardinalis* → **Zephyranthes cardinalis** C. Wright. *Zephyranthes* is conserved over *Atamosco*.
 79 *Hymenocallis caymanensis* → **Hymenocallis latifolia** (Mill.) Roemer. This change follows the treatment by Sealy (1954).

ORCHIDACEAE

- 83 *Carteria corallicola* → **Basiphyllaea corallicola** (Small) Ames. *Carteria* is a later homonym for a genus of algae. *Basiphyllaea* was erected as a genus to correct this situation.
 83 *Vanilla eggersii* → **Vanilla dilloniana** Correll.
 84 *Vanilla articulata* → **Vanilla barbellata** Reichb. f. This treatment of *Vanilla* in the Bahamas follows Correll (1950).
 84 *Pelexia adnata* → **Spiranthes adnata** (Sw.) Benth. Although *Pelexia* is a conserved name, it is also a generic synonym of *Spiranthes* (Garay and Sweet, 1972).
 84 *Pelexia setacea* → **Eltroplectris calcarata** (Sw.) Garay

- et Sweet. Luer (1972) changed *Pelexia setacea* to *Centrogenium setaceum* but Garay and Sweet (1972) maintained that this combination is based on an illegitimate name and therefore should be *Eltroplectris calcarata* (Sw.) Garay et Sweet.
- 85 *Ibidium tortile* → **Spiranthes tortilis** (Sw.) L. C. Rich. *Ibidium* is considered to be a generic synonym of *Spiranthes*. (Garay & Sweet, 1972).
- 85 *Ibidium lucayanum* → **Spiranthes polyantha** Reichb. f. These names are considered synonymous by Luer (1972).
- 86 *Stenorrhynchus lanceolatus* → **Spiranthes lanceolata** (Aubl.) Léon. *Stenorrhynchus* is now treated as a generic synonym of *Spiranthes*. (See Dunsterville and Garay, 1965).
- 87 *Ponthieva brittonae* → **Ponthieva racemosa** var. **brittonae** (Ames) Luer. Two varieties of *Ponthieva racemosa* occur in the Bahamas. One is the typical variety (var. *racemosa*) as treated by Luer (1972) and reported by him as new to the flora. Var. *brittonae* is the reduction made by Luer of the name in B&M.
- 87 *Physurus querceticola* → **Erythodes querceticola** (Lindl.) Ames. *Physurus* is considered to be a generic synonym of *Erythodes* (Garay and Sweet, 1972).
- 89 *Polystachya minuta* → **Polystachya flavescens** (Lindl.) J. J. Smith. Although the epithet *minuta* (from *Epidendrum minutum* Aubl.) is the oldest name available, it is preoccupied in *Polystachya*, and hence, *P. flavescens* must be used.
- 89 *Spathiger rigidus* → **Epidendrum rigidum** Jacq. *Spathiger* is considered a generic synonym of *Epidendrum*.
- 90 *Auliza nocturna* → **Epidendrum nocturnum** Jacq. *Auliza* is considered a generic synonym of *Epidendrum* (Dunsterville and Garay, 1965; Luer, 1972).
- 91 There is much discussion among orchid taxonomists whether *Encyclia* should be segregated from *Epiden-*

drum or not. For the moment, I accept the treatment of Dressler (1961; 1966) and Beckner (1970) in maintaining *Encyclia* at the generic level as in B&M.

- 91 *Encyclia rufa* → **Encyclia bahamensis** (Griseb.) Britt. et Millsp. Specimens labeled *E. rufa* from the Bahamas are now all best considered *E. bahamensis*. *Encyclia rufa* is, as B&M suspected, still not known from the archipelago.
- 92 *Encyclia diurna* → **Encyclia hodgeana** (A. D. Hawkes) Beckner. This name change is required because of more complete understanding of the taxa involved. The species previously called *E. diurna* or *E. gracilis* is, in fact, a hybrid between *E. hodgeana* and *E. tampensis*. (See Beckner, 1970).
- 93 *Epicladium boothianum* → **Encyclia boothiana** var. **erythronioides** (Small) Luer. *Epicladium* is a generic synonym of *Encyclia*.
- 93 *Anacheilium cochleatum* → **Encyclia cochleata** var. **triandra** (Ames) Dressler. *Anacheilium* is a generic synonym of *Encyclia*.
- 95 *Laeliopsis domingensis* → **Broughtonia lindonii** (Lindl.) Dressler. This change is made in accord with the treatment by Dressler (1961).
- 95 *Limodorum simpsoni* → **Calopogon tuberosus** (L.) Britten, Stearns, and Poggenberg. This treatment follows Luer, 1972.

PICRODENDRACEAE

- 103 *Picrodendron macrocarpum* → **Picrodendron baccatum** (L.) Krug et Urb. in Engl. I presently have *Picrodendron* under study. It appears that this genus should be placed within the Euphorbiaceae. There is likely only one species, which would be the typical one, *P. baccatum*.

ULMACEAE

- 104 *Trema lamarckiana* → **Trema lamarckianum** (R. et S.) Blume. The gender of *Trema* should be neuter.

MORACEAE

105 *Ficus jacquinifolia* → **Ficus perforata** L.

Ficus brevifolia → **Ficus citrifolia** Mill. Recent treatments of *Ficus* (DeWolf, 1969 and Condit, 1969) have equated *F. perforata* with *F. jacquinifolia* A. Rich. in Sagra. Moreover, they have also equated *F. brevifolia* and *F. citrifolia*. B&M's *F. brevifolia* Nutt. (lectotype at BM) must become *F. citrifolia* Mill., the earlier name (lectotype at BM, chosen by Dandy). I have further studied *F. perforata* which DeWolf and Condit have given as the correct name for *F. jacquinifolia* (which itself should be written *jacquinifolia*). The Linnaean name must be typified by an illustration in Plumier associated with the dissertation on the plants of Surinam (1775). Although there is a specimen of *F. perforata* at LINN (Savage Catalog No. 1240: 9), the only reference in the Dissertation (and the later *Amoenitates*) in this context is that to Plumier. The specimen at LINN appears to be of the tree of Central America and northern South America, *F. pertusa* L. f. I should like to acknowledge the consultation and discussion with Dr. Gordon DeWolf which proved very valuable in application of names in *Ficus*. A key to the Bahama material follows:

1. Syconia sessile *Ficus aurea* Nutt.
1. Syconia stalked 2.
 2. Syconia 7-10 mm. in diameter; petioles less than 1 cm.; blades obovate; lateral veins flush with lower surface; leaf base cuneate *Ficus perforata* L.
 2. Syconia 8-18 mm. in diameter; petioles longer than 1 cm.; blades ovate; lateral veins ± prominent, somewhat elevated on lower surface; leaf blade base rounded *Ficus citrifolia* Mill.

LORANTHACEAE

- 108 Generic study of *Dendropemon*, *Phthirusa*, and *Phoradendron* is needed before good species concepts and correct nomenclature emerge.

ARISTOLOCHIACEAE

- 113 *Aristolochia passifloraefolia* → ***Aristolochia passiflorifolia*** A. Rich. in Sagra. With the exception of the orthographic change (above) made in accord with rules adopted at the Seattle Congress, the names for *Aristolochia* species in the Bahamas remain as they were in B&M (Pfeifer, 1966; 1970).

POLYGONACEAE

- 114 *Persicaria hydropiperoides* → ***Polygonum hydropiperoides*** Michx.
- 114 *Persicaria punctata* → ***Polygonum punctatum*** Ell.
- 115 *Persicaria portoricensis* → ***Polygonum densiflorum*** Meissn. *Persicaria* is treated by Graham and Wood (1955) as a section of *Polygonum*.
- 115 *Fagopyrum fagopyrum* → ***Fagopyrum esculentum*** Moench. This change is necessary in order to avoid a tautonym.
- 117 *Coccolobis laurifolia* → ***Coccoloba diversifolia*** Jacq.
- 117 *Coccolobis bahamensis* → ***Coccoloba tenuifolia*** L.
- 117 *Coccolobis diversifolia* → ***Coccoloba swartzii*** Meisn. *Coccoloba* is conserved over *Coccolobis*. All *Coccoloba* species therefore should change spelling to conform. The 3 species mentioned above are changed further in accord with Howard (1957). From Howard's treatment also comes the change of citation for *Coccoloba uvifera* (L.) L., Syst. Nat., ed. 10, p. 1007. 1759.

CHENOPODIACEAE

- 121 *Dondia linearis* → ***Suaeda linearis*** (Ell.) Moq.
- 121 *Dondia fruticosa* → ***Suaeda fruticosa*** (L.) Forsk.
- 121 *Dondia insularis* → ***Suaeda insularis*** (Britt.) Urb. et Ekm. *Dondia* is considered to be a taxonomic synonym

of *Suaeda*. *Suaeda* Forsk. ex Scopoli remains in the list of conserved names even though the reason for its inclusion is no longer valid.

AMARANTHACEAE

- 124 *Amaranthus gracilis* → **Amaranthus viridis** L. Reed (1968) and Merrill (1936) considered these species to be taxonomic synonyms. *Amaranthus viridis* L. is the earlier name.
- 126 *Centrostachys indica* → **Achyranthes aspera** var. **indica** L. *Centrostachys* seems better treated as a generic synonym *Achyranthes*.
- 126 *Achyranthes maritima* → **Alternanthera maritima** St. Hil.
- 126 *Achyranthes polygonoides* → **Alternanthera polygonoides** (L.) R. Br.
- 127 *Achyranthes repens* → **Alternanthera pungens** H.B.K. This treatment follows Reed, 1968. The epithet *pungens* is used for the last species rather than the earlier epithet *repens* because *Achyranthes repens* is a *nomen confusum* according to Reed.
- 128 *Philoxerus* remains the same except for citing an earlier date of publication: *Philoxerus vermicularis* (L.) R. Br. Prodr. Fl. Nov. Holl. 416. 1810.
- 128 *Iresine celosia* → **Iresine diffusa** Humb. et Bonpl. ex Willd. (Sp. Pl., ed. 4, 4: 765. 1806). *Iresine celosia* is an illegitimate name.

NYCTAGINACEAE

- 130 *Boerhaavea coccinea* Mill. → **Boerhavia coccinea** Mill. *Boerhaavea erecta* L. → **Boerhavia erecta** L. *Boerhavia* is the original spelling.
- 131 *Torrubia obtusata* → **Guapira obtusata** (Jacq.) Little.
- 131 *Torrubia cokeri* → **Guapira obtusata** (Jacq.) Little.
- 132 *Torrubia longifolia* → **Guapira longifolia** (Heimerl) Little.
- 132 *Torrubia bracei* → **Guapira bracei** (Britt.) Little. If one considers that blollies are similar to *Pisonia*

species, then *Torrubia* merges with *Pisonia*. If one wishes to recognize both as distinct genera, then one must take up *Guapira*, an earlier name than *Torrubia*. The Committee for Spermatophytes rejected a proposal to conserve *Torrubia*, hence a paper by Little (1968) which made the appropriate transfers to *Guapira*. It is currently felt that *Torrubia cokeri* is synonymous with *Guapira obtusata*; it has been so treated here. This is an exceedingly variable species with different forms having been named in the past.

PORTULACACEAE

- 138 *Portulaca phaeosperma* → **Portulaca rubricaulis** H.B.K. Legrand (1952) chose the earlier name for this species.

NYMPHAEACEAE

- 139 *Castalia pulchella* → **Nymphaea pulchella** DC. Wood (1959) has treated *Castalia* as a subgenus of *Nymphaea*.

LAURACEAE

- 143 *Ocotea coriacea* → **Nectandra coriacea** (Sw.) Griseb. Recent treatments have merged *Ocotea* and *Nectandra* (Wood, 1958; Allen, 1966).
- 144 *Persea pubescens* → **Persea palustris** (Raf.) Sarg. Kopp (1966) pointed out that *palustris* is an earlier epithet than *pubescens* for this species.

CASSYTHACEAE

- 144 *Cassytha americana* → **Cassytha filiformis** L. This change is necessitated because *filiformis* is the earlier epithet.

CRUCIFERAE (BRASSICACEAE)

- 146 Hitchcock (1945) recognized several varieties of *Lepidium virginicum*. If this treatment is followed, the Bahama one is var. *virginicum*.
- 147 *Sinapis arvensis* → **Brassica kaber** (DC.) L. C. Wheeler. Wheeler (1938) thought that *Sinapis* should

properly be considered a part of *Brassica*. *Sinapis arvensis* of B&M cannot be transferred to *Brassica* because there is already a *B. arvensis*. *Brassica kaber* appears to be an older combination than *B. willdenovii* Boiss., as attributed to the Bahamas in Adams, 1972.

- 148 *Radicula brevipes* → **Rorippa portoricensis** var. **pumila** (O. E. Schulz) Stuckey. The name used in B&M and its synonyms are misapplied to the Bahamian taxon, according to Stuckey (1972). Stuckey inadvertently maintained a neuter ending for the varietal epithet in his treatment; this is corrected above.
- 148 *Canara didyma* → **Coronopus didymus** J. E. Smith. *Coronopus* (1757) is an older name than *Canara* (1792). *Coronopus* Zinn. (1757) is conserved over *Coronopus* Miller (1754), a genus of Plantaginaceae.

MORINGACEAE

- 151 *Moringa moringa* → **Moringa oleifera** Lam. In avoiding the tautonym, *Moringa moringa*, Ernst (1963) has picked up *Moringa oleifera* for the horseradish-tree.

CRASSULACEAE

- 152 *Bryophyllum pinnatum* → **Kalanchoë pinnata** (Lam.) Pers. Treatments of *Kalanchoë* and *Bryophyllum* (Baldwin, 1938; Hamet, 1907) have recognized *Kalanchoë* as the inclusive genus.

ROSACEAE (AMYGDALACEAE)

- 153 *Laurocerasus myrtifolia* → **Prunus myrtifolia** (L.) Urb. The cherry-laurel is best considered in the larger genus *Prunus* especially in view of other recent floras which have so placed it.

CHRYSOBALANACEAE (AMYGDALACEAE)

- 154 *Chrysobalanus pellocarpus* → **Chrysobalanus icaco** L. Prance (1972) thought that there were insufficient means to separate *C. pellocarpus* from *C. icaco* and has treated them as taxonomic synonyms.

LEGUMINOSAE (MIMOSACEAE)

- 155 *Pithecellobium* is conserved over *Pithecolobium*, and hence all species change to this orthography. The ram's horn has been a source of confusion for a number of years. *Pithecellobium keyense* Britt. ex Coker in Shattuck was proposed to replace *P. guadalupense* because the latter name was not applicable. Britton did not state why he considered the name inapplicable. In creating the new name, Britton (actually Coker) had no description and hence, created a *nomen nudum*. This situation was rectified in 1928 by Britton and Rose. Although the type of *Mimosa guadalupensis* Pers., the basionym, cannot be found at present in the Jussieu Herbarium at P, there appears to be no valid reason why this name cannot be taken up, pending proof that this plant does *not* represent the concept of the species known as "ram's horn" in the West Indies and South Florida. Isely (1972) referred to specimens at the Delessert Herbarium and at Leiden which should be "critical," but inasmuch as the basionym is linked by Persoon with "Hab ad Guadalupam (Herb. Juss.)," the lectotype material should be sought in the Jussieu Herbarium. Why Britton and Rose indicated that this species was "not *Inga guadalupensis* Desv." (which is based on the same basionym) is unknown. The only *Pithecellobium* which occurs on Guadaloupe is this one. I am therefore retaining the name in B&M, but adding the parenthetical reference to the author of the basionym which was omitted in B&M: *Pithecellobium guadalupense* (Pers.) Chapm.
- 158 The *Lysiloma* species remain as in B&M (Gillis and Stearn, in press), except for correcting gender to neuter.
- 159 *Anneslia haematostoma* → **Calliandra haematomma** (Bert.) Benth.
- 159 *Anneslia formosa* → **Calliandra formosa** (Kunth) Benth. *Calliandra* is conserved over *Anneslia*. The

- specific epithet *haematostoma* in B&M appears to be a misprint, judging from the basionym they cite.
- 160 Despite efforts of Britton and Rose (1928) to fractionate *Acacia* into *Bahamia* and *Lucaya*, it seems best to maintain the three species of *Acacia* in B&M under the same names as in the flora: ***Acacia acuífera***, ***A. choriophylla***, and ***A. macracantha***.
- 161 *Vachellia farnesiana* → ***Acacia farnesiana*** (L.) Willd. *Vachellia* is best considered a generic synonym of *Acacia*.
- 162 *Leucaena glauca* → ***Leucaena latisiliqua*** (L.) Gillis et Stearn. Based on typification of an earlier name than either the epithet *glauca* or *leucocephala* (deWit, 1961). Gillis and Stearn (in press) have shown that *latisiliqua* should be taken up.
- 163 *Acuan virgatum* → ***Desmanthus virgatus*** (L.) Willd. var. ***virgatus***.
- 163 *Acuan depressum* → ***Desmanthus virgatus*** var. ***depressus*** (Willd.) Turner. *Desmanthus* is conserved over *Acuan*. The two Bahama plants probably are best considered distinct only at the infraspecific level; therefore the treatment of Isely (1970) is followed.
- 164 *Neptunia* — consult Windler (1966).
- 164 *Prosopis* — consult Johnston (1962).

LEGUMINOSAE (CAESALPINIACEAE)

- 166 *Cassia tora* → ***Cassia obtusifolia*** L. B&M suggest that *Cassia tora* and *C. obtusifolia* are synonyms and chose the former as the name to be used in the Bahama flora. Typification shows that such is not the case. DeWit (1955) selected a specimen in the Linnaean Herbarium as the type of *C. tora* L., but Brenan (1958) objected to this choice and selected a specimen in the Hermann Herbarium (at BM) as the type. Based on the position of the petiolar gland, length of flowering and fruiting pedicels, anther shape, and presence of a 1.2-2 mm. areole on both

sides of the seed, Brenan distinguished these two as distinct species. There is probably no *Cassia tora* in the New World according to Brenan.

- 168 *Chamaecrista chamaecrista* → **Cassia nictitans** L. Despite the efforts of Britton and Rose to fractionate *Cassia* into segregate genera *Chamaecrista*, *Ditre-mexa*, *Peirania*, etc., I maintain *Cassia* as an inclusive genus. This necessitates different names for the six species placed in *Chamaecrista* in B&M. *Cassia chamaecrista* L. is based on a composite collection according to Pennell (1917). Therefore the correct name for the annual plant that is distributed throughout Eastern United States is generally accepted as *C. fasciculata* Michx. "*Chamaecrista chamaecrista*" of B&M should be rather the perennial species, *Cassia nictitans* L. I believe it is necessary to retypify all the names used in this complex in order to apply these names properly.
- 169 *Chamaecrista riparia* → **Cassia caymanensis** C. D. Adams. Adams (1970) has shown that *Cassia riparia* is an illegitimate name, and therefore this plant must have a new epithet in *Cassia*.
- 169 *Chamaecrista lucayana* → **Cassia lucayana** Britt.
- 169 *Chamaecrista caribaea* → **Cassia caribaea** Northrop.
- 170 *Chamaecrista inaguensis* → **Cassia inaguensis** Britt.
- 170 *Chamaecrista lineata* → **Cassia lineata** Sw. These species revert to their original names in *Cassia*.
- 172 *Guilandina crista* → **Caesalpinia bonduc** (L.) R. Br. Gray nickerbean has been shown by Dandy and Exell (1938) to be *Caesalpinia* (or *Guilandina*) *bonduc*. The epithet *crista* as used by Linnaeus refers to an Old World species.
- 172 *Guilandina bonduc* → **Caesalpinia divergens** Urb.
- 172 *Guilandina ovalifolia* → **Caesalpinia ovalifolia** Urb. Current thought among those working with this group of scrambling shrubs of the coastal regions of the West Indies is to treat them as a section of *Caesalpinia*, rather than a separate genus *Guilandina*.

For some long period of time, *G. bonduc* was used to refer to the yellow-seeded nickerbean. As we have seen, proper typification by Dandy and Exell has shown that the name *bonduc* is misapplied when used thus. Among the synonyms given by B&M for this species, most apply to still other species. *Caesalpinia divergens* seems to be the earliest name available for this species. The yellow-seeded nickerbeans in the Bahamas (with the exception of a new species to be described by Gillis and Proctor from Inagua) can be separated as follows:

1. Seeds spherical, yellow; leaflets elliptic to sub-orbicular, obtuse or emarginate
..... *Caesalpinia ovalifolia* (Urb.) Britt.
1. Seeds oblong, bronze-brown; leaflets ovate, acute or acuminate
..... *Caesalpinia divergens* Urb.

- 173 I accept B&M's treatment of 1920 instead of the later treatment of Britton and Rose (1928) which recognized the segregate genus *Vicarago*. I see no reason to separate this taxon from *Caesalpinia*.

LEGUMINOSAE (FABACEAE)

- 177 *Ateleia cubensis* → ***Ateleia gummifera*** (Bert. ex DC.) Dietr. The epithet *gummifera* is an earlier epithet for this species (Rudd, 1968). ..
- 178 Yakovlev (1967 a and b) has recognized a number of subspecific units in *Sophora tomentosa* L. For the moment, these seem difficult to accept as other than insular forms, and therefore I consider the taxon to be the single, variable *S. tomentosa* throughout the archipelago as in B&M.
- 181 *Cracca cinerea* → ***Tephrosia cinerea*** (L.) Pers.
- 181 *Cracca cathartica* → ***Tephrosia senna*** H.B.K. Although *Cracca* Benth. in Benth. et Oersted is conserved over *Cracca* L., *Tephrosia* Pers. is conserved over *Cracca* L., *Needhamia* Scopoli, and *Reineria* Moench. The

correct generic name for the plants in the Bahamas is *Tephrosia*. Because the key to species in B&M is somewhat inadequate, a revised one follows:

1. Leaflets 9-15; racemes opposite the leaves; pod 2.5-4 mm. broad . . . *Tephrosia cinerea* (L.) Pers.
1. Leaflets 5-9; racemes terminal and opposite the leaves; pod 4-5 mm. broad
 *Tephrosia senna* H.B.K.

- 182 *Sesban sericea* → **Sesbania sericea** (Willd.) DC.
- 182 *Sesban occidentalis* → **Sesbania emerus** (Aubl.) Urb.
- 182 *Agati grandiflora* → **Sesbania grandiflora** (L.) Pers.
Sesbania is conserved over *Sesban* and *Agati*. The second of the species mentioned above was known only from fruit at the time of the writing of B&M. From collections made recently from the same population, I have determined it to be *S. emerus*.
- 183 *Stylosanthes* — consult Mohlenbrock (1957).
- 184 *Meibomia supina* → **Desmodium canum** (Gmel.) Schinz et Thell.
- 184 *Meibomia tortuosa* → **Desmodium tortuosum** (Mill.) DC.
- 184 *Meibomia mollis* → **Desmodium glabrum** (Mill.) DC.
Desmodium is conserved over *Meibomia*. *Supina* cannot be used as an epithet for the first species above because it is based on a name which is a later homonym (*Hedysarum supinum* Sw. non *H. supinum* Chaix ex Villars). *Incanum* has often been taken up as a specific epithet for this plant also (based on *Hedysarum incanum* Sw.), but the basionym is a later homonym for *H. incanum* Thunb. *Desmodium canum* is based on the earliest available legitimate epithet. *Desmodium glabrum* is based on an earlier basionym than *Meibomia mollis* of B&M.
- 185 *Alysicarpus nummularifolius* → **Alysicarpus vaginalis** (L.) DC. *Alysicarpus vaginalis* has been used for the false moneywort rather than a combination based on *Hedysarum nummularifolium* L. Schindler (1926)

interprets the Linnaean material as being *Indigofera echinata*, in part, and *Alysicarpus monilifer*, in part, hence the choice of *Hedysarum vaginale* L. as the basionym rather than the earlier one.

- 186 *Ecastophyllum ecastophyllum* → **Dalbergia ecastophyllum** (L.) Taub. *Dalbergia*'s having been conserved over *Ecastophyllum* eliminates the problem of the tautonym in B&M.
- 186 *Ichthyomethia piscipula* → **Piscidia piscipula** (L.) Sarg. *Piscidia* has been conserved over *Ichthyomethia*. (See Rudd, 1969).
- 187 *Abrus abrus* → **Abrus precatorius** L. The later epithet of Linnaeus is used to avoid the tautonym.
- 188 *Bradburya floridana* → **Centrosema floridanum** (Britt.) Lakela.
- 188 *Bradburya virginiana* → **Centrosema virginianum** (L.) Benth. *Bradburia* has been conserved for a genus of Compositae over *Bradburya* of the Leguminosae. See also Lakela (1963).
- 191 *Canavali lineata* → **Canavalia rosea** (Sw.) DC.
- 192 *Canavali bahamensis* → **Canavalia nitida** (Cav.) Piper. *Canavalia* is conserved over *Canavali*. Sauer (1964) revised species of *Canavalia*, but apparently overlooked Johnston's note (1949b) on publication of names referring to *C. maritima*. The basionym of this oft-used binomial has been treated as *Dolichos maritima* Aubl., but Thouars, in making the combination *Canavalia maritima*, did not in fact cite the Aublet name; hence it is not a new combination, but a new name dating from 1813. Aublet's name cannot then be transferred to *Canavalia* because it is pre-empted by the Thouars combination, albeit for the same species. Alas, another name proposed in the interval is the oldest which must be used, *Canavalia rosea* (Sw.) DC. Species 2 of B&M (*Canavali gladiata*) is probably not in the Bahamas. All specimens bearing this determination by either Britton or Mills-

paugh have been annotated by Sauer as *C. maritima* (= *C. rosea*).

- 192 *Cajan cajan* → **Cajanus cajan** (L.) Millsp. *Cajanus* is conserved over *Cajan*. The tautonym of B&M can thus be avoided.
- 193 *Dolicholus reticulatus* → **Rhynchosia reticulata** (Sw.) DC.
- 193 *Dolicholus swartzii* → **Rhynchosia swartzii** (Vail) Urb.
- 193 *Dolicholus minima* → **Rhynchosia minima** (L.) DC. *Rhynchosia* is conserved over *Dolicholus*. Dr. John Grear indicates (personal communication) that *Rhynchosia caribaea* based on *Glycine caribaea* Jacq. is not in the flora, thus agreeing with B&M. The latter is ironically not native to the New World, but is restricted to South Africa.
- 194 *Phaseolus lathyroides* → **Macroptilium lathyroides** (L.) Urb. On the basis of having five calyx teeth rather than four, *Macroptilium* is segregated from the large genus *Phaseolus*.
- 195 *Dolichos lablab* → **Lablab purpureus** L. Many workers (including Adams, 1972) use the generic segregate *Lablab* in preference to *Dolichos*. If one follows this trend, then the change above is indicated. Otherwise, *Dolichos lablab* may continue to be used.
- Dolichos insularis* → **Oxyrhynchus volubilis** Brandegee. This change follows studies by Rudd (1967).
- 195 *Vigna repens* → **Vigna luteola** (Jacq.) Benth. in Mart. Although the epithet *repens* is the oldest name, it is invalidated in *Vigna* by *V. repens* Baker, published in 1876 (Merrill, 1910).

OXALIDACEAE

- 197 *Inoxalis intermedia* → **Oxalis intermedia** A. Rich.
- 197 *Xanthoxalis corniculata* → **Oxalis corniculata** L. Modern treatment of Oxalidaceae would merge *Inoxalis* and *Xanthoxalis* into *Oxalis* (Eiten, 1963).

LINACEAE

- 200 *Cathartolinum curtissii* → **Linum medium** var. **texasnum** (Planch.) Fern.
- 200 *Cathartolinum corallicola* → **Linum bahamense** var. **corallicola** (Small) Rogers.
- 200 *Cathartolinum bahamense* → **Linum bahamense** Northrop var. **bahamense**.
- 201 *Cathartolinum bracei* → **Linum bahamense** var. **bracei** (Small) Rogers.
- 201 *Cathartolinum lignosum* → **Linum bahamense** Northrop. var. **bahamense**. Rogers (1963; 1968) has restored *Linum* as the correct name for the yellow-flowered species in the West Indies. I have followed his 1963 treatment chiefly.

ZYGOPHYLLACEAE

- 202 *Guaiacum* — consult Porter (1972).

MALPIGHIACEAE

- 205 *Byrsonima cuneata* → **Byrsonima lucida** (Mill.) DC. It is generally agreed that the plum-berry or locust-berry should be *Byrsonima lucida*, based on *Malpighia lucida*, an earlier epithet than *cuneata*. But upon whose *M. lucida*? Most authors attribute the name to Swartz, but his *M. lucida* is a later homonym for *M. lucida* Mill. Both names can be typified by material at BM. DeCandolle (1824) specifically indicated the Swartz material as basionym, but it is illegitimate as a later homonym. Kunth (1923) indicated that he thought that *M. lucida* should be a *Byrsonima* but did not make the transfer in accord with the Code. Rather than presume to make a new combination at this date myself, I interpret this situation in the light of history. Swartz undoubtedly knew of Miller's name and probably even examined herbarium material from the Chelsea Physic Garden upon which the lectotype of *M. lucida* Mill. (chosen by Gillis) has been selected. That he (Swartz) did not specifically indicate that

he was taking up Miller's name is not important, it seems to me. There is ample precedent with Jacquin and Linnaeus, for instance, in assuming that the later author knew of the earlier work but did not, under existing convention, always cite the author of the earlier binomial, or place of publication. With this assumption, I shall follow Robertson (1971), in attributing the combination to DeCandolle with a lectotype of Miller's name at BM.

SIMAROUBACEAE

- 211 Cronquist's treatment of *Alvaradoa* (1944) would make the Bahamian populations *Alvaradoa amorphoides* subsp. *psilophylla* (Urb.) Cronq.

BURSERACEAE

- 212 *Elaphrium inaguense* → **Bursera inaguensis** Britt.
 212 *Elaphrium simaruba* → **Bursera simaruba** (L.) Sarg.
Bursera is conserved over *Elaphrium*.

POLYGALACEAE

- 216 *Badiera oblongata* → **Polygala oblongata** (Britt.) Blake. It seems desirable not to segregate the woody species of *Polygala* into the genus *Badiera*.

EUPHORBIACEAE

- 219 *Cicca disticha* → **Phyllanthus acidus** (L.) Skeels. This name change follows Webster (1956-58).
 220 *Margaritaria bahamensis* → **Margaritaria tetracocca** (Baill.) Webster. Webster (1956-58: J. Arnold Arbor. 38: 66) found that an earlier epithet applied to this species.
 220 *Xylophylla epiphyllanthus* → **Phyllanthus epiphyllanthus** L. This treatment follows Webster (1967).
 221 *Phyllanthus pruinosus* → **Phyllanthus caroliniensis** subsp. **saxicola** (Small) Webster.
 221 *Phyllanthus pentaphyllus* → **Phyllanthus pentaphyllus** C. Wright subsp. **pentaphyllus**. This treatment follows Webster (1970).

- 223 *Croton flocculosus* Geisl. → **Croton flavens** var. **balsamiferus** (Jacq.) Muell.-Arg. It appears to me that *Croton flocculosus* is best treated as a variety of the widespread *Croton flavens*. It matches well the lectotype of *Croton balsamiferus* Jacq. (lectotype from Martinique at BM), the basionym.
- 225 *Curcas curcas* → **Jatropha curcas** L. Placement of the physic-nut in *Jatropha* seems to be the best placement taxonomically, and also avoids a tautonym.
- 225 *Adenoropium gossypifolium* → **Jatropha gossypifolia** L. *Adenoropium* is best treated as a subdivision of *Jatropha*.
- 225 *Argythamnia* — consult Ingram (1967).
- 228 The place of publication of *Acalypha alopecuroidea* Jacq. should be Collect. 3: 196. 1790.
- 229 *Acalypha ostryaefolia* → **Acalypha ostryifolia** Ridd.
- 229 *Pera bumeliaefolia* → **Pera bumeliifolia** Griseb. These orthographic changes are required by the Seattle Code.
- 230 *Manihot manihot* → **Manihot esculenta** Crantz. This name is the earliest available to replace the tautonym used in B&M.
- 232 *Gymnanthes lucida* → **Ateramnus lucidus** (Sw.) Rothm. Rothmaler (1944) and Dandy (1967) have resurrected *Ateramnus* P. Browne to replace the later *Gymnanthes* Sw. Although I am of the opinion that *Gymnanthes* should be conserved over *Ateramnus*, conservation was already rejected once by the Special Committee for Pteridophyta and Phanerogamae (Taxon 3: 241. 1954). There appears to be no choice but to adopt the new combination in *Ateramnus*.
- 234 *Adenorima gymnonota* → **Euphorbia gymnonota** Urb. *Adenorima* is treated as a section of *Euphorbia* by Webster (1967) and that treatment is followed here.
- 235 *Arthrothamnus cassythoides* → **Euphorbia cassythoides** Boiss. *Arthrothamnus* differs too little from other forms of *Euphorbia* to be segregated from it.

- 235 *Tithymalus trichotomus* → **Euphorbia trichotoma** H.B.K. *Tithymalus* is treated by Webster (1967) as a section of *Euphorbia*.
- 236 *Aklema petiolaris* → **Euphorbia petiolaris** Sims. *Aklema* differs too little from other forms of *Euphorbia* to be segregated from it.
- 238 *Chamaesyce wilsonii* → **Chamaesyce lecheoides** var. **wilsonii** (Millsp.) Burch.
- 238 *Chamaesyce lecheoides* → **Chamaesyce lecheoides** Millsp. var. **lecheoides**.
- 238 *Chamaesyce insulae-salis* → **Chamaesyce centunculoides** (HBK.) Millsp.
- 238 *Chamaesyce exumensis* → **Chamaesyce lecheoides** var. **exumensis** (Millsp.) Burch. These name changes follow the treatment by Burch (1966).

BUXACEAE

- 243 *Tricera bahamensis* → **Buxus bahamensis** Baker in Hook. *Tricera* is best treated by the earlier name *Buxus* (Howard, 1962).

ANACARDIACEAE

- 244 Poison-ivy in the Bahamas is the typical subspecies: **Toxicodendron radicans** (L.) Kuntze subsp. **radicans** (see Gillis, 1971).

CELASTRACEAE

- 247 *Rhacoma coriacea* → **Crossopetalum coriaceum** Northrop.
- 248 *Rhacoma crossopetalum* → **Crossopetalum rhacoma** (Sw.) Hitchc.
- 248 *Rhacoma aquifolia* → **Crossopetalum aquifolium** (Griseb.) Hitchc.
- 248 *Rhacoma ilicifolia* → **Crossopetalum ilicifolium** (Poir.) Kuntze. *Crossopetalum* was revived by Brizicky (1964) as the earliest name for this genus.
- 249 Although several recent workers have accepted *Cas-sine* as a widespread genus that would include *Elaeodendron* (Adams, 1972 and Ding Hou, 1963),

I have chosen to follow Robson (1965) to recognize the segregate genus *Elaeodendron* for the Bahamas, thus leaving *Cassine sensu stricto* for a small African genus.

SAPINDACEAE

- 252 *Thyana discolor* → **Thouinia discolor** Griseb. *Thouinia* Poit. is an earlier name than *Thyana* Hamilt. and is conserved over *Thouinia* Thunb. ex L.f.
- 253 *Allophylus cominia* → **Allophylus cobbe** (L.) Raeusch. Leenhouts (1967) makes a strong case for recognizing only one worldwide species in this genus. He has found no morphological gaps which can be used to distinguish separate populations in any geographical sense. Having chosen to recognize only one species, Leenhouts chose *A. cobbe* as the all-encompassing name from two Linnaean names of the same date.
- 253 *Melicocca bijuga* → **Melicoccus bijugatus** (L.) Jacq. The correct spelling of this name was worked out by Brizicky (1963).

RHAMNACEAE

- 257 *Sarcomphalus taylori* → **Ziziphus taylori** (Britt.) M. C. Johnston. Johnston's treatment (1964) merges *Sarcomphalus* with *Ziziphus*.
- 257 *Colubrina reclinata* → **Colubrina elliptica** (Sw.) Briz. et Stern.
- 258 *Colubrina cubensis* → **Colubrina cubensis** var. **floridana** M. C. Johnston.
- 258 *Colubrina colubrina* → **Colubrina arborescens** (Mill.) Sarg. These changes follow the monographic treatment by Johnston (1971).

TILIACEAE

- 263 *Triumfetta* — consult Ko Ko Lay, 1950.

MALVACEAE

- 264 *Phymosia* — consult Fryxell (1971).
- 266 *Gayoides crispum* → **Herissantia crispa** (L.) Brizicky.

The earliest generic name available for this segregate of *Abutilon* is *Herissantia* (See Brizicky, 1968).

- 267 *Sida ciliaris* → **Sida ciliaris** L. var. **ciliaris**.
- 268 *Sida carpinifolia* → **Sida acuta** subsp. **carpinifolia** (L.f.) Borss.
- 268 *Sida spinosa* → **Sida spinosa** var. **angustifolia** (Lam.) Griseb.
- 268 *Sida hederacifolia* → **Sida javanensis** Cav. emend. Borss. Recent treatments of *Sida* (Kearney, 1954b; Clement, 1957; Borssum Waalkes, 1966) do not all agree on treatment of the species in the Bahamas. I have followed Clement and Borssum Waalkes here.
- 271 *Malache scabra* → **Pavonia spicata** Cav. var. **spicata**.
- 271 *Malache bahamensis* → **Pavonia bahamensis** Hitchc. *Pavonia* is conserved over *Malache*. Kearney's (1954a) treatment is followed here except for one point. He overlooked the fact that *Pavonia scabra* (B. Vogel) Juble et Quentin is a later homonym of *P. scabra* Presl. It must be replaced by *P. spicata* var. *spicata*.
- 271 *Malvaviscus sagraeanus* → **Malvaviscus arboreus** var. **mexicanus** Schlecht. Schery (1942) has found an older name than the one given in B&M.
- 272 *Hibiscus bahamensis* → **Hibiscus brittonianus** Kearney. Because *H. bahamensis* Britt. is a later homonym, Kearney (1954c) published a new name.
- 272 Although a number of recent publications place okra in the genus *Hibiscus* as *H. esculentus*, Bates (1965) and Borssum Waalkes (1966) retained it in *Abelmoschus*, as in B&M, on the basis of the spathe-like calyces which are basically adnate to the staminal tube and corolla, and which are circumscissilely deciduous.
- 273 *Pariti tiliaceus* → **Hibiscus tiliaceus** L. subsp. **elatus** (Hochr.) Borss. Borssum Waalkes (1966) is followed in his treatment of this taxon.
- 274 *Gossypium barbadense* → **Gossypium arborescens** var. **nadam** (Watt.) Prockh.

- 274 *Gossypium punctatum* → **Gossypium hirsutum** var. **punctatum** (Schum.) Hutch. Hutchinson (1943) is followed for the treatment of indigenous cotton species.

STERCULIACEAE

- 276 The use of names in *Melochia* has been thoroughly considered by Goldberg (1967) who considered *Moluchia* and *Melochia* synonymous. The only changes from B&M therefore are orthographic. Because the keys in B&M are inadequate, a new key to the Bahama species is given here:
1. Flowers in sessile glomerules, many per cluster; sinus between calyx teeth acute; fruit a 5-parted coccus less than 3.5 mm. in diameter
 *Melochia nodiflora* Sw.
 1. Flowers pedicelled, 3-10 per cluster; sinus between calyx teeth rounded to truncate; fruit a 5-angled capsule, greater than 5 mm. in diameter 2.
 2. Capsule with rounded angles and unbranched hairs; inflorescences mostly in axillary cymes or appearing terminal; foliage leaves glabrous or with scattered, simple hairs; leaves only slightly lighter in color on lower surface than on upper
 *Melochia pyramidata* L.
 2. Capsule sharply angled, with dense stellate hairs; inflorescences mostly opposite the leaves, never terminal; foliage leaves densely stellate; leaves tending toward being discoloured, much lighter on the lower surface than upper due to dense pubescence
 *Melochia tomentosa* L.
- 278 *Waltheria americana* → **Waltheria indica** L. An examination of Linnaean material and resultant lectotypification has resolved the question of a name for

the common *Waltheria* in accord with Brizicky (1966) and the example used in the International Code (Art. 57). The lectotype (chosen by Gillis) of *Waltheria indica* L. is in the Hermann Herbarium at BM. The lectotype of *Waltheria americana* L. is at LINN (Savage Catalog No. 852: 1). They represent the same taxon; both names originate from the same date (1753). Robert Brown (in Tuckey, Narr. Exp. River Zaire 484. 1818) appears to be the first to adopt the name *W. indica* L. for the combined species, and therefore should be followed.

The descriptions and separation of the two species of *Waltheria* in B&M are ambiguous. The foliage of *W. bahamensis* is decidedly bronze in the field; herbarium specimens do not show this character well, but it is useful as a field character. The following key should assist in making determinations:

Foliage green; branches of stellate hairs 2-4 mm. long *Waltheria indica* L.
 Foliage bronze; pubescence in small tufts, branches of stellate hairs less than 1 mm.
 *Waltheria bahamensis* Britt.

- 278 *Ayenia pusilla* → **Ayenia insulicola** Cristobal. Except for an orthographic change necessitated by the Seattle Code, the *Ayenia* species should be named according to Cristobal (1960).

HYPERICACEAE

- 280 *Ascyrum linifolium* → **Hypericum hypericoides** (L.) Crantz. The nomenclature of *Ascyrum* has undergone much discussion (Adams, 1957; Adams and Robson, 1961). The treatment of Adams and Robson (ibid.) has been followed here.

FLACOURTIACEAE

- 284 *Myroxylon ilicifolium* → **Xylosma ilicifolia** Northrop.
 284 *Myroxylon bahamense* → **Xylosma bahamensis** (Britt.) Standl. *Xylosma* G. Forst. has been conserved over

Myroxylon J. R. et G. Forst. as a genus of Flacourtiaceae (*Myroxylon* L. has been conserved in the Leguminosae). The question of whether these two species are, in fact, distinct still needs to be explored further.

PASSIFLORACEAE

- 288 *Passiflora pallida* → **Passiflora suberosa** L. The two names above are synonyms of the same date; they were united by Killip (1938). See also Brizicky, 1961. *Passiflora* species in the Bahamas will be evaluated in a separate paper.

LOASACEAE

- 290 *Mentzelia* — consult Darlington (1934).

LYTHRACEAE

- 300 *Parsonsia parsonsia* → **Cuphea parsonsia** (L.) R. Br. *Parsonsia* is conserved for a genus of Apocynaceae; it therefore cannot be used for a genus of Lythraceae.

COMBRETACEAE (TERMINALIACEAE)

- 302 *Conocarpus erecta* → **Conocarpus erectus** L. The generic name *Conocarpus* should be treated as masculine in accordance with the International Code (Recommendation 75A). In Stearn (1966) the substantive termination *-carpus* is consistently treated as masculine. Stearn (personal communication) suggests that Linnaeus may have treated *Conocarpus* as feminine by analogy with many classical second-declension names of trees.

MYRTACEAE

- 303 *Eugenia buxifolia* → **Eugenia foetida** Pers. The Myrtaceae need to be reworked in the light of McVaugh's generic guidelines and definitions (1956; 1968). The change indicated above is made in accord with his analysis of types (McVaugh, 1973).
- 305 *Pimenta pimenta* → **Pimenta dioica** Merr. This change is made to avoid a tautonym.

- 306 *Anamomis longipes* → **Psidium longipes** (Berg) McVaugh var. **longipes**.
- 306 *Anamomis bahamensis* → **Psidium longipes** var. **orbiculare** (Berg) McVaugh.
- 306 *Anamomis lucayana* → **Myrcianthes fragrans** (Sw.) McVaugh. The first two of these changes is in accord with the interpretation of these species by McVaugh (1973). *Psidium longipes* var. *orbiculare* is further elaborated in the same paper by McVaugh by describing unnamed races which can be distinguished. *Myrcianthes fragrans* is defined in an earlier paper by McVaugh (1963).

ONAGRACEAE

- 310 *Jussiaea suffruticosa* → **Ludwigia octovalvis** subsp. **sessiliflora** (Micheli) Raven. This name change follows the treatments of *Ludwigia* by Raven (1962; 1968).

UMBELLIFERAE (AMMIACEAE)

- 313 *Foeniculum foeniculum* → **Foeniculum vulgare** Gaertn. This change is made to avoid a tautonym.

MYRSINACEAE

- 315 *Icacorea paniculata* → **Ardisia escallonioides** Cham. et Schl.
- 316 *Icacorea guadalupensis* → **Ardisia obovata** Desv. *Ardisia* is conserved over *Icacorea*. The Bahama plants need further study and interpretation, but they appear to be named best as stated above.
- 316 *Rapanea guianensis* → **Myrsine floridana** A. DC. *Rapanea guianensis* Aubl. may be typified by a specimen of Aublet's in P (lectotype of Gillis). It represents a plant with lustrous, large leaves from northern South America. The northern West Indian and Floridian species has dull, smaller leaves. Furthermore, it represents the group of species with a globose stigma, a character which has been used to separate *Myrsine* from *Rapanea*. Stearn (1969) made the

combination *Myrsine punctata* (Lam.) Stearn for this species, but the name is a later homonym for a species of the Pacific region which had been published several years earlier. The earliest available name for this plant is *Myrsine floridana* A. DC. If one prefers this species in *Rapanea*, then its name should be *R. punctata* (Lam.) Lundell.

PRIMULACEAE

- 318 *Samolus floribundus* → **Samolus parviflorus** Raf. This change is made in accordance with Channell and Wood (1959); it is based on an earlier epithet.

SAPOTACEAE

- 320 *Chrysophyllum* — consult Cronquist (1945).
- 321 *Sideroxylon foetidissimum* → **Mastichodendron foetidissimum** (Jacq.) Cronq. This change is made in accord with the treatment by Cronquist (1946a).
- 322 *Lucuma serpentaria* → **Pouteria domingensis** (Gaertn.) Cronq. var. **domingensis**. This change follows the treatment by Cronquist (1946a).
- 322 *Dipholis salicifolia* → **Bumelia salicifolia** (L.) Sw. Although Cronquist (1945) retained *Dipholis* as a segregate genus, Stearn (1968) merged it with *Bumelia*. It is the latter treatment which is followed here.
- 323 *Bumelia angustifolia* → **Bumelia celastrina** H.B.K.
- 323 *Bumelia loranthifolia* → **Bumelia americana** (Mill.) Stearn subsp. **americana**.
- 323 *Bumelia bahamensis* → **Bumelia americana** (Mill.) Stearn subsp. **americana**. The *Bumelia* complex in the West Indies has been treated by Stearn (1968), a treatment followed here. The following key should help clarify the species in the Bahamas:

1. Ovary glabrous; endosperm copious; leaves longer than 7 cm.; terminal shoots never becoming thorns .. *Bumelia salicifolia* (L.) Sw.
1. Ovary pubescent; endosperm little or none;

leaves shorter than 6 cm.; terminal shoots often thorny 2.

2. Leaves narrow, linear to spatulate, 2-10 mm. broad (juveniles may be larger); fruit oblong; plant inhabiting shores, mangal, and saline areas
 *Bumelia celastrina* H.B.K.

2. Leaves obovate to oblanceolate, 1-4 mm. broad; fruits globose; inhabiting uplands
 *Bumelia americana* (Mill.) Stearn
 subsp. *americana*.

324 *Mimusops emarginata* → **Manilkara bahamensis** (Baker) Lam. et Meeuse. Probably no species in the Bahamas is easier to identify and yet harder to name than the wild dilly! In addition to the long list of synonyms given in B&M, it has been called *Achras emarginata* (L.) Little, *Mimusops jamaïqui* (Wright) Dubard, *M. jamaïqui* subsp. *emarginata* (L.) Cronq., and *Manilkara parvifolia* (Nutt.) Dubard, to name a few. For the moment, I have selected *Manilkara bahamensis* (Baker) Lam. et Meeuse. Thus, it resides in the same genus preferred by Moore and Stearn (1967) for its close relative, the sapodilla, and also preferred by Cronquist (1945).

324 *Sapota achras* → **Manilkara zapota** (L.) P. van Royen. By the same token as with the wild dilly (above), the cultivated sapodilla has had a variety of names, many of which are permutations of each other. Moore and Stearn (ibid.) analyzed the problem thoroughly and leave a choice of names depending upon the breadth of one's generic concepts. Along with them, I choose the one indicated above.

EBENACEAE

325 *Maba crassinervis* → **Diospyros crassinervis** (Krug et Urb.) Standl. *Maba* is treated as being a synonym of *Diospyros*. The name given above in *Diospyros* is temporary. A new combination will soon be published by Mr. Frank White (Oxford).

OLEACEAE

- 328 The *Maypea bumelioides* of B&M will be placed in *Chionanthus* by Stearn at a later date, at which time a new combination will be published.

GENTIANACEAE

- 331 Based on Shinnery's typification (1957), the name of the marsh gentian remains the same, but the author of the binomial and place and date of publication change from what is given in B&M: *Eustoma exaltatum* (L.) Salisb., Parad. Lond. t. 34. 1806.
- 331 *Sabbatia campanulata* → **Sabatia stellaris** Pursh.
- 332 *Sabbatia simulata* → **Sabatia stellaris** Pursh. Wilbur (1955) and Perry (1971) have studied the taxonomy of *Sabatia* in detail. As a consequence, one species only is considered to be in the Bahamas. The correct spelling of the generic name should also be noted.

MENYANTHACEAE

- 333 *Nymphoides aureum* → **Nymphoides grayana** (Griseb.) Kuntze. This name change is made in accord with the treatment by Ornduff (1969). It should be noted that this so-called endemic *Nymphoides* (according to B&M) is also found in Cuba.

APOCYNACEAE

- 334 *Plumiera obtusa* → **Plumeria obtusa** L. var. **obtusa**.
- 334 *Plumiera inaguensis* → **Plumeria obtusa** L. var. **obtusa**.
- 334 *Plumiera bahamensis* → **Plumeria obtusa** L. var. **obtusa**.
- 335 *Plumiera rubra* → **Plumeria rubra** L.
- 335 *Plumiera sericifolia* → **Plumeria obtusa** var. **sericifolia** (C. Wright) Woodson. Woodson (1938) reworked the species of *Plumeria*, taking up the correct spelling of the generic name. He considered several of the "species" of B&M to be insular races of *P. obtusa* var. *obtusa*.

- 335 Woodson (1936) recognized *Neobracea bahamensis* as endemic, but also noted that there are three other species in Cuba, i.e., it is not a monotypic genus as stated in B&M.
- 336 Stearn (1964) confirmed the name of the periwinkle as *Catharanthus roseus* (L.) G. Don.
- 336 *Echites echites* → ***Echites umbellata*** Jacq. var. **umbellata**.
- 337 *Rhabdadenia paludosa* → ***Rhabdadenia biflora*** (Jacq.) Muell.-Arg.
- 337 *Rhabdadenia sagraei* → ***Angadenia berterii*** (A. DC.) Miers.
- 338 *Urechites lutea* → ***Urechites lutea*** var. **serica** Long. Woodson (1936) redefined the generic limits of a number of American Apocynaceous plants. His treatment is followed here. Long (1970a), in studying populations in South Florida, treated *Urechites* such that the Bahamian populations are recognized as a distinct pubescent population, *U. lutea* var. *sericea*. Because the *Apocynaceous* vines are not adequately keyed in B&M, and because the names of all of them have been changed, the following key has been prepared for use in separating them:

KEY TO BAHAMIAN APOCYNACEOUS VINES

1. Corolla white or ivory, usually more than 5 cm. long; leaves remaining flat or folding along the midrib when pressed; follicles of pair divergent, not tending to curve back like pincers, 4-10 mm. thick 2.
2. Follicles of a pair widely divergent (greater than 180°); tube of corolla salverform with rotate lobes; cylindrical part of corolla 10-15 times the length of the sepals; calyx lobes free nearly to base, linear to linear-lanceolate . . . *Echites umbellata* Jacq. var. *umbellata*.
2. Follicles of a pair divergent less than 90°; tube of corolla funnelform; cylindrical part of

corolla 2-3 times the length of the sepals; calyx lobes free scarcely more than 2/3 the length, ovate, to 2.5 mm. broad

.. *Rhabdadenia biflora* (Jacq.) Muell.-Arg.

1. Corolla yellow, usually less than 5 cm. long; leaves tending to curl under at the edges when pressed; follicles of a pair diverging at an angle of less than 60°, curving back to touch near their tips, resembling a pair of pincers, 1.5-3 mm. thick 3.

3. Vine scarcely 1 m. long; corolla 2-4 cm. long; leaves oblong, usually less than 1 cm. broad; pedicels glabrous; calyx lobes free less than half their length, 1-1.5 mm., acuminate; cylindric part of corolla visible most of its length (i.e., not hidden by sepals); petiole 2 mm. long

..... *Angadenia berterii* (A.DC.) Miers

3. Vine up to 3.5 m. long; corolla 4-5 cm. long; leaves obovate or elliptic to 3 cm. broad; pedicels densely pubescent; calyx lobes free nearly to base, 8-12 mm. long, linear; cylindric portion of corolla hidden by sepals; petiole 1 cm. long

..... *Urechites lutea* var. *sericea* Long

339 *Rauwolfia tetraphylla* → **Rauwolfia nitida** Jacq. Rao (1956) thought that *Rauwolfia tetraphylla* is indigenous to the Greater Antilles, Central America, and South America as far as Peru and Venezuela. The Bahamian species is *R. nitida*, which is not a synonym of *R. tetraphylla* as suggested in B&M.

339 *Vallesia glabra* → **Vallesia antillana** Woodson. Woodson (1937, 1938b) found that the true *Vallesia glabra* is a plant of Mexico and the Pacific Coast of South America. The species of southern peninsular Florida and the West Indies that has corollas twice the length of those of *V. glabra* needed a name. The name *V. glabra* of B&M is thus misapplied.

ASCLEPIADACEAE

- 342 *Metastelma northropiae* → **Cynanchum northropiae** (Schltr.) Alain.
- 342 *Metastelma hamatum* → **Cynanchum caribaeum** Alain.
- 343 *Metastelma inaguense* → **Cynanchum inaguense** (Vail) Howard et Dunbar.
- 343 *Metastelma linearifolium* → **Cynanchum savannarum** Alain.
- 343 *Metastelma eggersii* → **Cynanchum eggersii** (Schltr.) Alain.
- 343 *Metastelma palustre* → **Cynanchum angustifolium** Pers. *Metastelma* species are considered synonymous with *Cynanchum*. (See Woodson, 1941; Alain, 1955). Much work needs to be done on the Bahamian species, but almost certainly several will be united. I shall refrain from making transfers to *Cynanchum* of several names which have not already been transferred because I feel certain at this point that these names are synonyms of other names in the flora. (See also Howard and Dunbar, 1964). Merrill and Hu (1949) discovered that Muhlenberg had found *Cynanchum angustifolium* to be the earliest legitimate name for the last species listed above. They indicated the extensive synonyms for this species, a few of which had never been included in the standard indices.
- 344 *Philibertella clausa* → **Sarcostemma clausum** (Jacq.) R. & S. *Sarcostemma* is an earlier name than *Philibertella* (Woodson, 1941).

CONVOLVULACEAE

- 347 *Evolvulus glaber* → **Evolvulus convolvuloides** (Willd.) Stearn.
- 347 *Evolvulus alsinoides* → **Evolvulus alsinoides** var. **griesebachianus** Meissn. in Mart.
- 347 *Evolvulus linifolius* → **Evolvulus alsinoides** var. **linifolius** (L.) Baker. Stearn (1972) has modified the nomenclature of several species of *Evolvulus* in the flora in the course of typification of their names. The

last taxon listed above is now believed not to occur in the flora.

- 348 *Jacquemontia jamaicensis* → **Jacquemontia havanensis** (Jacq.) Urb. Dr. Kenneth Robertson (personal communication) has pointed out that this name change is required because of an earlier basionym.
- 349 *Calonyction aculeatum* → **Ipomoea alba** L.
- 350 *Calonyction tuba* → **Ipomoea macrantha** R. et S. Both Ooststroom (1940) and Gunn (1972) have worked with *Calonyction*. Gunn's nomenclature is followed here.
- 350 *Quamoclit quamoclit* → **Ipomoea quamoclit** L.
- 350 *Quamoclit coccinea* → **Ipomoea hederifolia** L. *Quamoclit*, like *Calonyction*, is treated as a section of *Ipomoea*. (see Ooststroom, 1953).
- 352 *Ipomoea cathartica* → **Ipomoea acuminata** (Vahl) R. et S.
- 352 *Ipomoea pes-caprae* → **Ipomoea pes-caprae** subsp. **brasilensis** (L.) Ooststr. This treatment of *Ipomoea* follows that of Ooststroom (1940) and St. John (1970). The citation for *Ipomoea stolonifera* in B&M is incorrect; there is an earlier publication date of the combination: *Ipomoea stolonifera* (Cyrill.) Gmel., Syst. Veg. I: 345. 1796.
- 353 *Ipomoea dissecta* → **Merremia dissecta** (Jacq.) Hall. f. *Merremia* is segregated from *Ipomoea* on the basis of its smooth pollen and its corolla without a red or purple eye (O'Donell, 1941; Ooststroom with Hoogland, 1953; Verdcourt, 1963).
- 355 *Dichondra*. Consult Tharp and Johnston (1961).

CUSCUTACEAE

- 356 *Cuscuta pentagona* → **Cuscuta campestris** Yuncker. This species needed a new name because of confusion in the old one (Yuncker, 1932).

HYDROPHYLLACEAE

- 357 *Marilaunidium jamaicense* → **Nama jamaicensis** L.

Nama is an earlier name than *Marilaunidium*. Furthermore, *Nama jamaicensis* L. is the conserved type species.

BORAGINACEAE (EHRETIACEAE)

- 357 *Sebesten sebestena* → ***Cordia sebestena*** L.
- 358 *Varronia globosa* → ***Cordia globosa*** var. ***humilis*** (Jacq.) Johnston.
- 358 *Varronia bahamensis* → ***Cordia bahamensis*** Urb.
- 359 *Varronia brittonii* → ***Cordia brittonii*** (Millsp.) Macbride.
- 359 *Varronia lucayana* → ***Cordia lucayana*** (Millsp.) Macbride. *Sebesten* and *Varronia* should be treated as synonyms of *Cordia* (Macbride, 1916; Johnston, 1949).
- 360 *Rochefortia bahamensis* → ***Rochefortia spinosa*** (Jacq.) Urb. According to Lefor (1968), the *Rochefortia* in the Bahamas is not an endemic species, but the same as that found in Cuba.
- 361 There is debate over the generic selection for bay lavender. For the moment, I maintain *Mallotonia*, as in several other recent floras (Gooding, Loveless, and Proctor, 1965; Adams, 1972).
- 362 *Heliotropium parviflorum* → ***Heliotropium angiospermum*** Murray. The change of name is required because *H. angiospermum* is an earlier name.
- 363 *Heliotropium inundatum* → ***Heliotropium procumbens*** Mill. *Heliotropium procumbens* is an earlier name for the same species. Both names can be typified by specimens at BM; the lectotypes have been selected by me.

VERBENACEAE

- 365 *Valerianoides fruticosa* → ***Stachytarpheta fruticosa*** (Millsp.) B. L. Robinson.
- 366 *Valerianoides jamaicensis* → ***Stachytarpheta jamaicensis*** (L.) Vahl. *Stachytarpheta* is conserved over *Valerianoides*.

- 366 *Bouchea prismatica* → ***Bouchea prismatica*** var. ***longirostra*** Grenzen. This treatment follows the revision of *Bouchea* by Grenzenbach (1926). Moldenke (1971) believes that the typical variety is also present in the Bahamas.
- 367 *Priva* — consult Kobuski (1926).
- 368 *Lippia stoechadifolia* → ***Phyla stoechadifolia*** (L.) Small.
- 368 *Lippia nodiflora* → ***Phyla nodiflora*** (L.) Greene var. ***nodiflora***.
- 369 *Lippia reptans* → ***Phyla nodiflora*** var. ***reptans*** (H.B.K.) Moldenke. These changes are made in accord with the treatment of *Phyla* by Moldenke (1965). *Lippia geminata* of B&M is probably not found within the archipelago. The appropriate treatment of this binomial would be *Lantana microcephala* A. Rich. in any event.
- 369 According to treatment by Long (1970a) our variety of *Lantana ovatifolia* would be the typical variety (var. *ovatifolia*).
- 371 Using Moldenke's treatments (1958a, b, and c) of *Citharexylum*, I have prepared the following key to distinguish the Bahamian species:

Pedicels less than 1.2 mm. long during anthesis; pyremes 2-loculate, fruit not shiny; leaves ± pilose, closely reticulate-veined, the reticulation prominent above and below . . . *Citharexylum fruticosum* L.

Pedicels 2 mm. long or more during anthesis; pyremes 1-loculate, fruit shiny; leaves glabrous, widely reticulate-veined, reticulation obscure above *Citharexylum caudatum* L.

Moldenke (1958a; 1971) has considered 5 infra-specific taxa of *C. fruticosum* to exist in the Bahamas: var. *fruticosum*, var. *smallii* Moldenke, var. *subvillosum* Moldenke, var. *villosum* (Jacq.) O. E. Schultz, and forma *bahamense* Moldenke. Having made field

studies on the characters upon which these taxa are based, I consider these to be insular forms or populations without names. For those who wish to name these variations, an appropriate key is found in Moldenke (1958a).

- 373 *Callicarpa* — consult Moldenke (1936).
 373 *Petitia* — consult Moldenke (1937).
 374 *Volkameria aculeata* → **Clerodendrum aculeatum** (L.) Schlecht. var. **aculeatum**. *Volkameria* is treated by Moldenke (1971) as a section of *Clerodendrum*. The place of citation for *C. aculeatum* is incorrect in B&M. The author of the combination is Schlechtendahl, and the citation is *Linnaea* 6: 750. 1831.
 375 *Clerodendrum fragrans* → **Clerodendrum philippinum** Schauer. Howard and Powell (1968) found that *C. fragrans* was an illegitimate name. Moldenke (1971) considers the Bahamian population to be var. *pleniflorum* Schauer.
 375 *Avicennia nitida* → **Avicennia germinans** (L.) L. Stearn (1958) found this earlier epithet which applies to the species of black mangrove in the West Indies, but failed to note that its earliest combination was by Linnaeus himself.

LABIATAE (LAMIACEAE)

- 376 *Melosmon cubense* → **Teucrium cubense** Jacq. Epling (1925) united *Melosmon* and *Teucrium*.
 377 *Leonurus* — consult Epling (1925).
 378 The place of publication for *Leonotis nepetifolia* (L.) R.Br. is the *Prodromus florae Novae Hollandiae*, p. 504. 1810, and not as given in B&M (Epling, 1925).
 378 In Epling's treatment (1938-39), *Salvia serotina* L. and *S. micrantha* Vahl (indicated as synonyms in B&M) were separated on rather minor characters. Through the courtesy of Dr. Mildred Mathias and Dr. Raymond Harley, I have seen an unpublished manuscript of Epling and Carlos Jativa in which

these species were reunited. It seems best to continue to treat them as synonymous. (Permission of Carlos Jativa to refer to this unpublished material is acknowledged with appreciation.)

- 379 On the basis of rather minor characters of the calyx, Shinnars (1962) reworked the *Micromeria brownei* complex, recognizing the Bahamian populations as *M. bahamensis* Shinnars. Because my own collections from Inagua more closely resemble the taxon which Shinnars cites from Hispaniola, I believe more work needs to be done before the matter is resolved. Chiefly because of the minor nature of the characters which are used in defining Shinnars's species, I continue to recognize a broadly treated *M. brownei* (Sw.) Benth.

SOLANACEAE

- 381 *Physalis angulata* → **Physalis angulata** L. var. **angulata**.
- 382 *Physalis turbinata* → **Physalis cordata** Mill.
- 382 *Physalis pubescens* → **Physalis barbadensis** Jacq.
These changes are in accord with the treatment by Waterfall (1967).
- 383 *Solanum verbascifolium* → **Solanum erianthum** D. Don. Roe (1968) found that the old name for this plant did not apply to the species in our flora.
- 385 *Lycium spathulifolium* → **Lycium tweedianum** var. **chrysocarpum** (Urb. et Ekm.) Hitchc. In the monograph of *Lycium* (Hitchcock, 1932), the Bahamian plant required a name change. Although it is possible that the species of the Florida Keys (*L. carolinianum* Walt.) is in the Bahamas, it has yet to be found.

SCROPHULARIACEAE

- 388 *Maurandya antirrhinaeflora* → **Maurandya antirrhiniflora** H. et B. ex Willd. This orthographic change is required by the Seattle Code. I can now report this species to be on the far side of the archipelago from New Providence as recorded in B&M: *Gillis 11780* from Grand Turk.

- 389 *Bramia monnieri* → **Bacopa monnieri** (L.) Pennell. *Bacopa* has been conserved over *Brami* and *Moniera*. It is an earlier name than *Bramia*.
- 390 Although Pennell (1935) segregated *Erinus* from *Mecardonia*, I believe that *Mecardonia* is best treated as an inclusive genus, thus maintaining *Mecardonia procumbens* (Mill.) Small as in B&M.
- 392 *Afzelia cassioides* → **Seymeria cassioides** (Walt.) Blake. *Seymeria* is conserved over *Afzelia*.
- 393 *Buchnera elongata* → **Buchnera floridana** Gandoger. Philcox (1965) thinks that *B. elongata* is a misapplied name for the Florida and Bahama populations.

LENTIBULARIACEAE

- 394 *Setiscapella subulata* → **Utricularia subulata** L.
- 395 *Stomoisia cornuta* → **Utricularia cornuta** Michx. Taylor (1967) includes *Setiscapella* and *Stomoisia* within *Utricularia*.

BIGNONIACEAE

- 397 *Macrocatalpa punctata* → **Catalpa punctata** Griseb. var. **punctata**. This change is made in accord with the treatment of *Catalpa* by Paclt (1952).

PEDALIACEAE

- 399 *Sesamum orientale* → **Sesamum indicum** L. These names are synonymous binomials of the same publication date. *Sesamum indicum* L. has been used more commonly than the other name. Hill (1939) pointed out that DeCandolle (Pl. Rar. Jard. Genève 18, t.5 — 1889) was the first to unite the two names under *Sesamum indicum*.

ACANTHACEAE

- 401 *Blechum brownei* should be retained despite the attempt of some to change the name of this species to *Blechum pyramidatum*. The Linnaean binomial is *Ruellia blechum*. Lamarck renamed the species *Bar-*

laria pyramidata, but this name is illegitimate, being superfluous when published. Jussieu later published a new name in *Blechum*; this is accepted because the tautonym which would be created by transferring the Linnaean epithet is illegitimate (Bremekamp, 1938; Long, 1970b).

- 402 *Gerardia droseroides* → **Stenandrium droseroides** Nees in DC.
- 402 *Gerardia bracteosa* → **Stenandrium bracteosum** (Britt. et Millsp. Britt. ex Leonard). *Stenandrium* is conserved over *Gerardia*.
- 403 *Anthacanthus spinosus* → **Oplonia spinosa** (Jacq.) Raf. Stearn (1971) has studied the generic complex of which this species is a part and has recognized our plant to be an *Oplonia*.
- 404 *Diapedium assurgens* → **Dicliptera assurgens** (L.) Juss. *Dicliptera* is conserved over *Diapedium* (see also Long, 1970b). I have chosen the lectotype to be at LINN (No. 28:23 according to the Savage Catalog, 1945).

RUBIACEAE

- 407 The Rubiaceae are in need of in-depth treatment as a whole. Names accepted here may be subject to revision as more work is done.
- 408 *Oldenlandia callitrichoides* → **Hedyotis callitrichoides** (Griseb.) Lewis. Merrill and Metcalf (1942) and Lewis (1961) have united *Oldenlandia* and *Houstonia* with *Hedyotis*. Lewis's treatment is followed here.
- 409 *Rachicallis americana* → **Rhachicallis americana** (Jacq.) Hitchc. The original spelling of the generic name has been restored. Despite the fact that it has been written without the first "h" ever since the original publication, there seems no reason not to accept the original orthography considering the Greek origin. Nickerson and Tripp (1973) have reported this species to have either male or perfect flowers, never female.
- 410 *Randia mitis* → **Randia aculeata** L. These two names,

synonyms of the same date of publication, have been united under *R. aculeata*.

- 411 *Catesbaea parviflora* → **Catesbaea parviflora** var. **septentrionalis** Krug et Urb. ex Urb. The Bahamian populations fit this variety better than do the typical species form.
- 412 *Hamelia erecta* → **Hamelia patens** Jacq. These names are synonyms of the same date of publication. Thomas Elias (personal communication) has informed me that L'Héritier was the first to unite them, and should be followed.
- 413 *Guettarda taylori* → **Guettarda nashii** Britt. et Millsp.
- 413 *Guettarda inaguensis* → **Guettarda nashii** Britt. et Millsp. There does not seem to be sufficient difference to maintain three distinct species of *Guettarda* supposedly endemic to the vicinity of Matthew Town, Inagua. Having studied both the type specimens (at NY) and material in the field, I have concluded that Britton and Millspaugh named specimens, not species. *Guettarda inaguensis* is represented by a type that appears to have come from an aberrant form with long lengths of bare branches and leaves only near the tips. *Guettarda taylori* is represented by a type that has no flowers left and for which no fruits were ever known. Because of the inadequacy of these two specimens, it seems best to select the name for the united species by the type possessing the most adequate material. Inasmuch as these three species names originate from the same data, I am choosing *G. nashii* as the name to be used when all three are united. The populations of *Guettarda* in the vicinity of Matthew Town, although variable, appear to me to be best treated as a single species.
- 414 *Stenostomum lucidum* → **Antirhea lucida** (Sw.) Hook. f. in Benth. et Hook. f.
- 415 *Stenostomum myrtifolium* → **Antirhea myrtifolia** (Griseb.) Urb.

415 *Stenostomum densiflorum* → **Terebraria resinosa** (Vahl.) Sprague. *Stenostomum* as used by B&M is better divided into *Antirhea* and *Terebraria*. *Antirhea* is an older name than *Stenostomum* and hence must be the name used for those species traditionally placed in *Stenostomum*. The tortuous history of the name of *Terebraria resinosa* is recounted thoroughly by Sprague (1932). Sprague recognized two West Indian species of *Terebraria*, differing only in shape of the areoles of the leaf venation. In his treatment, the Bahamian population would be *T. densiflora*. I consider these differences to represent only insular forms, not worthy of nomenclatural separation. A key to the species in the Bahamas of the old *Stenostomum* follows:

1. Ovary 2 (-4) loculate; flowers without bracts; anthers half-exserted; stipules deciduous; foliage without resinous secretions *Antirhea lucida* (Sw.) Hook. f. in Benth. et Hook. f.
1. Ovary 4-6 loculate; flowers subtended by minute bracts; anthers included; stipules persistent; foliage resinous-viscid 2.
2. Leaves 3 cm. long or less, elliptic to obovate-oblong; diffusely-branched shrub with leaves crowded near ends of branches; midvein very pronounced, often white; 2-4 flowers per branch of inflorescence; stipules ovate, not forming a collar around stem; inflorescences paired on either side of stem, but not branched
 *Antirhea myrtifolia* (Griseb.) Urb.
2. Leaves 4-9 cm. long, oblong-lanceolate; coarsely-branched shrub or small tree with leaves widely scattered; midvein only slightly more pronounced than lateral veins; more than 6 flowers per branch of inflorescence; stipules forming a collar 2-4 mm. broad

around stem; inflorescence bifid with flowers only on inside (adaxial surface) of branches
..... *Terebraria resinosa* (Vahl) Sprague.

- 419 *Psychotria undata* → **Psychotria nervosa** Sw. Jacquin described *P. undata* in the *Plantarum rariorum horti caesarei schoenbrunnensis*. According to Stafleu (1967), the title page date of 1798 is probably in error, and actual date of publication may have been as late as 1803. In any event, Swartz in his *Prodrromus* (1788) published the name *Psychotria nervosa* for the same species, clearly the earliest date of publication. *Psychotria nervosa* Benth. (1841) and *P. nervosa* D. Don (1825) are later homonyms.
- 420 *Ernodea cokeri* → **Ernodea taylori** Britton.
- 421 *Ernodea nashii* → **Ernodea millspaughii** Britton. It is difficult to make hard-and-fast decisions on the *Ernodea* problems in the Bahamas at this juncture. Whether *E. littoralis* and *E. angusta* are truly distinct is questionable. Long (1970a) has treated *E. angusta* as a variety of *E. littoralis* which may be the best way to handle these perplexing taxa. Until intensive study is made of these two species with comparisons to the other *Ernodea* taxa in the Bahamas, I shall continue to recognize these two as species. Distinctions among the other four species do not seem to hold up when examined under field conditions. Although more study will be carried out on *Ernodea* in the Bahamas, under a tentative arrangement which seems reasonable at this stage, *E. cokeri* is considered to be a synonym of *E. taylori*, and *E. nashii* is merged with *E. millspaughii*. The latter name was chosen from the two originating at the same date of publication because it is represented by the type specimen possessing both flowers and fruits. The type of *E. taylori* has no flowers at all; the type of *E. nashii* must have had flowers at the time Britton described the species, but they are missing from the type

specimens now (types are at NY). The differences as observed in the type specimens of these micro-species seem inadequate for maintenance in this exceedingly variable genus (also see Britton, 1908, for descriptions of "races" within this complex). A key to identify the Bahamian species of *Ernodea* within my species concept at the moment follows:

1. Calyx lobes nearly as long as the fruit, or longer 2.
2. Corolla white to very pale pink
 *Ernodea littoralis* Sw.
2. Corolla red *Ernodea angusta* Small.
1. Calyx lobes less than half as long as the
 fruits 3.
3. Leaves 6-8 mm. wide
 *Ernodea millspaughii* Britton.
3. Leaves 1-3 mm. wide
 *Ernodea taylori* Britton.

422 *Borreria saxicola* → ***Borreria brittonii*** Standl. Unlike *Ernodea*, the eight species of *Borreria* in the Bahamas — or, at least most of them — seem to be good biological species with a high degree of endemism in the southern islands, especially Inagua and the Caicos group. Whereas actual treatment of this genus is deferred for the moment, one name change needs to be cited. Following Standley (1931), the name *B. saxicola* Britt. is replaced because it is a later homonym.

423 *Spermacoce* — consult Bacigalupo (1972).

CUCURBITACEAE

426 *Anguria pedata* → ***Psiguria pedata*** (Jacq.) Howard. In his treatment of modern names for plants discussed in Jacquin's *Selectarum*, Howard (1973) found that the name *Anguria* Jacq. was a later homonym for *Anguria* Mill. The next available generic name is *Psiguria*; Howard made the necessary new combinations for this species.

LOBELIACEAE

- 428 *Lobelia* — consult McVaugh (1943).

GOODENIACEAE

- 429 *Scaevola plumierii* → **Scaevola plumieri** (L.) Vahl. This orthographic change is made to conform to the present International Code.

COMPOSITAE (AMBROSIACEAE
AND CARDUACEAE)

- 431 *Xanthium chinense* → **Xanthium strumarium** L. *Xanthium strumarium* is an earlier name than *X. chinense*.
- 432 *Ambrosia paniculata* → **Ambrosia artemisiifolia** L. I have selected a lectotype of *Ambrosia paniculata* from material in the Michaux Herbarium at Paris. Furthermore, I have examined the lectotype of *A. artemisiifolia* which was selected by Payne (1970) at LINN, and concur with Payne that these plants are conspecific. The Linnaean name is obviously the older one and should be used.
- 432 *Iva* — consult Jackson (1960).
- 436 *Ageratum latifolium* → **Ageratum conyzoides** subsp. **latifolium** (Cav.) M. F. Johnson. This name change has been made in accord with the treatment by Johnson (1971). The typical subspecies has also been reported from the Bahamas, thus adding a taxon to the flora.
- 440 *Chrysopsis graminifolia* → **Heterotheca graminifolia** (Michx.) Shinnars. Shinnars (1951), Wagenknecht (1960), and Harms (1964) have argued for the merger of *Heterotheca* and *Chrysopsis*.
- 441 *Aster bracei* → **Aster tenuifolius** var. **aphyllus** Long. Long (1970a) has treated the Bahamian populations in connection with those of South Florida which he was studying. This taxon seems best treated as a variety of the more widespread *A. tenuifolius*.
- 443 *Leptilon linifolium* → **Conyza floribunda** H.B.K.

CUPRESSACEAE (PINACEAE)

- 462 *Juniperus lucayana* → **Juniperus bermudiana** L. More work needs to be done on typification and on population studies in *Juniperus* to place the Bahamian plant properly. For the moment, it is treated in accord with Moore, 1966.

CYCADACEAE

- 463 A thorough monograph of *Zamia* is needed. In a manuscript by Chamberlain, left unpublished at his death, *Z. lucayana* has been referred to the Cuban *Z. guttierrezii* Sauv. So little material of this plant, as well as of *Z. angustifolia* and *Z. tenuis*, is available at this time, that it is not appropriate to make a nomenclatural judgment now. The recent rediscovery of the Long Island population of "*Z. lucayana*" by S. R. Hill (in press) and its subsequent cultivation will help to make material available for further study.

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STONE'S PLANTS OF SOUTHERN NEW JERSEY:
A REPRINT¹

To those who had always considered Witmer Stone as an ornithologist — and one of the country's greatest — the appearance in 1911 of his "Plants of Southern New Jersey" came as a distinct surprise. Had they known more about the man they would have realized that he was one of the last of the all-around naturalists, interested in mammals, insects and plants as well as birds.

The recent facsimile reprint of Stone's book, by the Quarterman Publications, Inc., of Boston, makes available once more a work which for more than sixty years has been the standard reference for everyone who is interested in the flora of the Pine Barrens, as well as the other plant provinces of southern New Jersey.

Originally published as Part II of the Annual Report of the New Jersey State Museum, this important volume has for many years been out of print and has, indeed, become something of a collector's item.

Although one can not be other than grateful that this flora is once again in circulation, it is to be regretted that the Foreword was not written by a professional botanist, preferably one who was intimately acquainted with Witmer Stone.

Since this reprint is a facsimile, every word, every punctuation mark and every misprint appears exactly as it did in the original. There are numerous discrepancies between its nomenclature and that in use today. It would have been helpful to the reader if Elizabeth M. Woodford, who wrote the Foreword, had explained the reasons for this.

Partly because he was a zoologist and partly because of his friendship with Dr. N. L. Britton of the New York Botanical Garden, Stone's treatment of plant names follows the now-abandoned American Code of Botanical Nomen-

¹Stone, Witmer. *The Plants of Southern New Jersey*. Reprint. 1973. Quarterman Publications, Inc., Boston, Massachusetts. 828 pp. Illust. \$25.00.

clature. This code, like that of the zoologists, permits the use of tautonyms or duplicate binomials. Hence we find in Stone such combinations as *Blephariglottis blephariglottis*, *Hepatica hepatica*, *Linaria linaria* and others.

The American Code never embraced the principle of the conservation of generic names and Stone therefore consistently employed what he considered to be the earliest generic epithets. As a consequence we have scores of generic names which are unfamiliar to most present-day taxonomists. A few examples will suffice: *Spathyema* for *Symplocarpus*, *Juncoides* for *Luzula*, *Abama* for *Narthecium*, *Vagnera* for *Smilacina*, *Gyrostachys* for *Spiranthes*, *Hicoria* for *Carya*, *Ammodenia* for *Arenaria (peploides)*, *Meibomia* for *Desmodium*, etc.

Fortunately most of the presently accepted names are cited in synonymy (although not always with the correct authority), but it seems a pity that a republication of this work should not have suggested some revision and updating of its nomenclature. It might also have corrected such misprints as "Sandy Hood" for "Sandy Hook" (page 432) and "dandelon" for "dandelion" (page 817).

Mrs. Woodford states that Stone's collection of 12,000 specimens went to the herbarium of the Academy of Natural Sciences of Philadelphia. Such is not the case. Realizing that many of his duplicates were already in the Academy and that he had frequently been in the field with members of the Philadelphia Botanical Club whose specimens had likewise been deposited there, I suggested to Dr. Stone that he leave his herbarium to the University of Pennsylvania. He readily agreed, and in the fall of 1942 the University received his collection of more than 14,000 sheets, rich not only in plants from southern New Jersey, but also in material from northern Pennsylvania. It was my pleasant task to supervise the incorporation of this collection into the herbarium of the University.

Witmer Stone once told me that his manuscript for the New Jersey Flora had been prepared in a little more than four months. Doubtless he had made some preliminary